



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

OCT 28 2019

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RETURN RECEIPT REQUESTED

Timothy R. Basilone
Vice-President - Environmental Affairs
American Zinc Products LLC
300 GSK Drive, Suite 201
Moon Township, Pennsylvania 15108

Re: American Zinc Products LLC - Mooresboro, North Carolina
EPA ID: NCR000159038
Administrative Order under RCRA Section 3013(a)
Docket No.: RCRA-04-2019-4350

Dear Mr. Basilone:

Enclosed is an Administrative Order (Order) issued to American Zinc Products LLC (AZP) specialty metals production facility, located in Mooresboro, North Carolina, by the United States Environmental Protection Agency, Region 4. This Order is issued pursuant to Section 3013(a) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6934(a). The Order requires that AZP conduct monitoring, testing, analysis, and reporting to ascertain the nature and extent of such hazard consistent with the work described in Section VI of the Order.

Compliance with the Order is required. Violation of the Order, or the failure or refusal to comply with any requirements of the Order, may result in enforcement of the Order. The Order becomes effective on the date of receipt by AZP, and requires the submittal of a written Initial Site Review Work Plan, as described in Section VI of the Order, within sixty (60) calendar days of the Effective Date.

If you have any questions or comments, please contact John E. Johnston, Project Coordinator, at (404) 562-8458.

Sincerely,

Carol L. Kemker
Director
Enforcement and Compliance Assurance Division

Enclosure

cc: Brent G. Burch, Hazardous Waste Section, NCDEQ

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4

61 Forsyth Street, S.W.
Atlanta, Georgia 30303

IN THE MATTER OF:) Docket Number: RCRA-04-2019-4350
)
American Zinc Products LLC) Proceeding under Section 3013(a)
484 Hicks Grove Road) of the Resource Conservation and
Moorestown, North Carolina 28114) Recovery Act, as amended, 42 U.S.C. § 6934
)
)
EPA I.D. No: NCR000159038)
)
<u>Respondent</u>)

**RCRA SECTION 3013(a) ADMINISTRATIVE ORDER ON CONSENT REQUIRING
MONITORING, TESTING, ANALYSIS, AND REPORTING**

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**RCRA SECTION 3013(a) ADMINISTRATIVE ORDER ON CONSENT REQUIRING
MONITORING, TESTING, ANALYSIS AND REPORTING**

I. JURISDICTION

1. This Administrative Order on Consent (Consent Order) is issued pursuant to the authority vested in the Administrator of the Environmental Protection Agency (EPA or the Agency) by Section 3013(a) of the Resource Conservation and Recovery Act (RCRA or the Act), as amended, 42 U.S.C. § 6934(a). The Administrator has delegated this authority to the Regional Administrator of the EPA, Region 4, who has in turn delegated this authority to the Enforcement and Compliance Assurance Division Director (Director), who is the Complainant and hereby issues this Consent Order.

2. This Consent Order is issued to American Zinc Products LLC (Respondent), formerly known as Horsehead Metal Products, Inc. and Horsehead Metal Products, LLC, a company doing business and organized under the laws of the State of North Carolina (North Carolina). Respondent is the owner and operator of the American Zinc Products LLC facility (Facility or Site), located at 484 Hicks Grove Road, Mooresboro, North Carolina.

3. Respondent consents to and agrees not to contest the EPA's authority to issue this Consent Order and to enforce its terms. Further, Respondent agrees not to contest the EPA's authority to compel compliance with this Consent Order in any subsequent enforcement proceedings, require Respondent's full or interim compliance with the terms of this Consent Order, or impose sanctions for violations of this Consent Order; provided, however, that Respondent retains any rights it may have to dispute the merits of such claims.

4. This Consent Order is based upon the administrative record compiled by the EPA and incorporated herein by reference. The record is available for review by Respondent and the public at the EPA's Regional Office at 61 Forsyth Street, S.W., in Atlanta, Georgia 30303, and at the Haynes Branch Library in Rutherford County, located at 2669 Hwy 221A, Mooresboro, North Carolina 28114. The index to the administrative record for this Consent Order is attached as Exhibit 1.

5. On December 31, 1984, the EPA granted North Carolina authorization to operate a hazardous waste program in lieu of the federal hazardous waste program pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b). Under RCRA, whether a state has been authorized to operate a hazardous waste program, the EPA retains its authority under Section 3013(a) of the Act.

II. PARTIES BOUND

6. The provisions of this Consent Order shall apply to and be binding upon Respondent and its officers, directors, employees, agents, contractors, successors, and assigns.

7. No change in ownership, corporate, or partnership status relating to the Facility will in any way alter the status or responsibility of Respondent under this Consent Order. Any conveyance by Respondent of title, easement, or other interest in the Facility described herein, or a portion of

such interest, shall not affect Respondent's obligations under this Consent Order. Respondent shall be responsible and liable for any failure to carry out all activities required of Respondent by this Consent Order, irrespective of its use of employees, agents, contractors, or consultants to perform any such tasks.

8. Respondent shall provide a copy of this Consent Order to all contractors, subcontractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Consent Order within seven (7) calendar days of the effective date of this Consent Order, or on the date of such retention, and Respondent shall condition all such contracts on compliance with the terms of this Consent Order.

9. Any documents transferring ownership and/or operations of the Facility from Respondent to a successor-in-interest shall include written notice of this Consent Order. In addition, Respondent shall, no less than thirty (30) calendar days prior to transfer of ownership or operation of the Facility, provide written notice of this Consent Order to its successor-in-interest, and written notice of said transfer of ownership and/or operation to the EPA.

III. STATEMENT OF PURPOSE

10. In entering into this Consent Order, the mutual objectives of the EPA and Respondent are the protection of human health and the environment through Respondent's implementation of testing, analysis, monitoring and reporting at the Facility (collectively referred to as "Work") to ascertain the nature and extent of the presence and release of hazardous wastes and/or hazardous constituents at or from the Facility.

IV. FINDINGS OF FACT

Ownership, Location, and Operational History

11. Respondent's Facility is approximately 160 acres in size and is located at 484 Hicks Grove Road, Mooresboro, North Carolina 28114. The Facility is situated in the southern portion of Rutherford County (latitude 35° 11' 27.8694" N; longitude -81° 50' 56.9256" W) approximately ½ mile north of the South Carolina/North Carolina state line and just west of US 221.

12. The Facility is surrounded by a mix of residential, undeveloped and industrial areas. The closest private residence is approximately 328 feet south of the Facility's entryway. Additionally, the Hicks Grove Baptist Church is approximately 392 feet south of the Facility's entryway. Dense woods border the western portion of the property. The northern border of the property is bounded by the Broad River.

13. The Facility receives partially reclaimed crude zinc oxide (CZO) in the form of waelz oxide (WOX), for reclamation. WOX is a partially reclaimed material generated during the partial reclamation of electric arc furnace (EAF) dust. EAF dust is an emission control dust/sludge generated from the primary production of steel in electric arc furnaces and, pursuant to 15A North Carolina Administrative Code (NCAC), Subchapter 13A.0106(d) [Title 40 of the Code of Federal Regulations (C.F.R.) § 261.32], is a listed hazardous waste with the Hazardous Waste Number

K061. According to 15A NCAC 13A.0106(m) [Appendix VII of 40 C.F.R. Part 261], EAF dust (K061) is listed as a hazardous waste because it may contain some of the following hazardous constituents: hexavalent chromium, lead, and cadmium. As a partially reclaimed material derived from a listed hazardous waste, unless subject to a State-specific variance granted under 15A NCAC 13A.0103(c) [40 C.F.R. § 260.30], or pursuant to other regulatory exclusions under 15A NCAC 13A.0106(a) [40 C.F.R. § 261.4], WOX remains a hazardous waste until the reclamation process is complete.

14. The Facility is designed to further process the WOX to produce zinc metal and metal concentrates containing cadmium, lead and silver. WOX is the primary feed material to the reclamation process. The reclamation process outputs include, but are not limited to: lead/silver concentrate, zinc concentrate, zinc organic concentrate, gypsum, and cadmium concentrate.

15. Construction of the Facility began in September 2011 and is still ongoing. The Facility began operating in March 2014 and continued operating until Respondent's bankruptcy filing in February 2016, after which the Facility operations were idled. While Respondent emerged from bankruptcy in 2017, the Facility remained idle until early 2019. In 2019, while attempting a phased startup of operations, the Facility sustained a catastrophic fire, demolishing a portion of the zinc production building. The Facility is currently minimally staffed, with primary activities limited to maintenance, construction and repair projects. While WOX is currently not being received at the Facility, hazardous waste and/or hazardous secondary materials continue to be generated from construction, maintenance and repair activities. The Facility is currently expected to restart operations before spring 2020.

16. The Facility consists of various active production areas, including but not limited to, a WOX Unloading Building/VOX Rail Yard Area, a WOX Leaching Area (100 Area), a Zinc Concentrate Area/Final Residue Press Area (100 Area), a WOX Wash Clarifier (100 Area), a PLINT Filter Plant/Truck Loading Area (100 Area), the Carbon Filter Tanks Decontamination Bay (200 Area), a Zinc Raffinate Area (200 Area), a Crud Press Area (200 Area), and a Melting/Casting/Alloying Area (500 Area). The Facility also includes a reagent storage area, warehouses, offices, laboratories, a storm water basin, process effluent and storm water discharge outfalls to the Broad River on the northern portion of the Facility, and the West Ponds and East Ponds. Maps showing the Facility's location and features are attached as Exhibit 2.

Regulatory/Sampling History

17. The Facility has been assigned EPA Identification Number NCR000159038. The Facility is currently identified as a Large Quantity Generator (LQG) of hazardous wastes and has historically managed hazardous wastes carrying the following Hazardous Waste Numbers: D001, D002, D006, D007, D008, D035, D039, F002, F003, F005, U160, U210 and K061. In addition, the Facility maintains the following wastewater discharge permits issued by the North Carolina Department of Environmental Quality (NCDEQ): Wastewater Permit NC0089109, Individual Industrial Stormwater Discharge Permit NCS000562, and General Permit NCG500000 for Non-Contact Discharges. The Facility also maintains Industrial Wastewater Sanitary Permit NC0087084 for discharges to the Forest City Riverstone Wastewater Treatment Plant, and Synthetic Minor Air Permit 10248R04.

18. On June 10, 2014, NCDEQ conducted a Focused Compliance Inspection (FCI) to investigate a complaint received concerning on-site ponds and bird mortality.

19. On August 13, 2014, the EPA conducted a Compliance Evaluation Inspection (CEI) and the NCDEQ conducted a FCI to determine the Facility's compliance with the applicable requirements of the RCRA regulations and the corresponding NCDEQ Hazardous Waste Management regulations. The inspection was based on a complaint received by the North Carolina Department of Labor regarding the mismanagement of process materials. This inspection is hereinafter referred to as the August 2014 CEI/FCI.

20. On October 14, 2015, the EPA and the NCDEQ conducted a CEI to determine the Facility's compliance with the applicable requirements of the RCRA regulations and the corresponding NCDEQ Hazardous Waste Management regulations. This inspection is hereinafter referred to as the October 2015 CEI.

21. On January 18-19, 2017, the EPA and the NCDEQ conducted a Case Development Inspection (CDI) to determine the Facility's compliance with the applicable requirements of the RCRA regulations and the corresponding NCDEQ Hazardous Waste Management regulations. This inspection is hereinafter referred to as the January 2017 CDI.

22. On January 24-25, 2017, the EPA's Science and Ecosystem Support Division (SESD) accompanied Regional RCRA staff and NCDEQ staff and conducted site sampling at the Facility. This event is hereinafter referred to as the January 2017 Sampling. The Case Development Investigation Evaluation Report and Focused Compliance Inspection Sampling Report generated following the January 2017 CDI and January 2017 Sampling events, are enclosed as Exhibits 3 and 4.

WOX Unloading Building/Rail Yard Area

23. The WOX Unloading Building and Rail Yard Area is comprised of several rail spurs and a WOX Unloading Building that receives railcars filled with WOX. WOX railcars enter the WOX Unloading Building via two bay doors. The WOX Unloading Building is equipped with eight unloading stations. During the January 2017 CDI, the inspectors observed the doors of the WOX Unloading Building facing the Rail Yard Area to be open, allowing air to flow through. Eight louvers were located on the Rail Yard Area side of the building and all louvers were open. On the opposite side of the building were eight more louvers; only one louver on this side was open. The inspectors observed unknown dust from the inside of the WOX Unloading Building, and on the interior and exterior sides of the louvers. In addition, the unknown dust was observed on the interior and the exterior sides of the gap where the corrugated metal wall of the WOX Unloading Building met the concrete slab.

WOX Leaching Area (100 Area)

24. During the August 2014 CEI/FCI, the inspectors observed a WOX leaching slurry (also known as leach residue), produced from washing of WOX, released to the exterior of the reactor

tanks and on the concrete surfaces of the walls and floor within the surrounding 100 Area secondary containment system. The leach residue appeared to have been released from the process reactor tanks and silos situated inside the 100 Area secondary containment system. A deposit of dry thick and cracked leach residue, with footprints, was present on the concrete floor, indicating that Facility personnel may have been exposed to the leach residue.

25. During the August 2014 CEI/FCI, inspectors were told by Facility personnel that the release of leach residue had been accumulating in the concrete secondary containment system for approximately three weeks.

26. During the October 2015 CEI, the inspectors observed that the 100 Area secondary containment system contained liquids, and that the drains and underground lines leading to the East Maintenance Pond were plugged with leach residue solids. The inspectors observed that leach residue mixed with storm water had accumulated in the 100 Area secondary containment system. Footprints were observed in the leach residue released to the 100 Area secondary containment system, indicating Facility personnel may have been exposed to the leach residue.

27. During the January 2017 CDI, the inspectors observed a storm water drain in Area 100 to be accumulating leach residue and what appeared to be storm water and other process solids, and the paved surface of the 100 Area corridor was covered in dried solids believed to be leach residue.

28. During the January 2017 Sampling, SESD took a solids sample (H05WAS) from the 100 Area Storm Drain. The sample results indicated that the solids sample had concentrations of cadmium, lead, and zinc, some of the main constituents of EAF dust (K061), at levels exceeding the Land Disposal Restrictions (LDR) treatment standards contained in 15A NCAC 13A.0112 [40 C.F.R. Part 268, Subpart D]. (See Exhibit 4).

Zinc Concentrate Area/Final Residue Press Area (100 Area)

29. During the August 2014 CEI/FCI and October 2015 CEI, the inspectors observed the 100 Area, which included the Zinc Concentrate Area and Final Residue Press Area. At this location, zinc concentrate was released to the concrete surface of the secondary containment system before being frontloaded into piles in the secondary containment/runoff area, and then accumulated in front of a blue building beside the Final Residue Press building. Facility representatives explained that the zinc concentrate was accumulating in the 100 Area concrete secondary containment system prior to being shipped offsite.

30. During the January 2017 CDI, the inspectors observed that zinc concentrate mixed with storm water had been released to the Zinc Concentrate Area secondary containment system. Zinc concentrate was visible on the concrete floor around the Final Zinc Storage Building, and the concrete curb surrounding a sewer manhole. A pile of zinc concentrate mixed with discarded asphalt was present between the Zinc Concentrate Area and the PLINT Filter Plant, above a storm water drain that was obstructed by solids. Facility personnel indicated that the concrete pad located at the Gypsum Plant was also used to maintain accumulations of zinc concentrate.

WOX Wash Clarifier (100 Area)

31. During the August 2014 CEI/FCI, October 2015 CEI and January 2017 CDI, the Final Press Residue Area was located directly across from the WOX Wash Clarifier. Inspectors observed washed WOX on the concrete surface around the WOX Wash Clarifier, and noted this material was being tracked via vehicle and foot traffic to/from the WOX Wash Clarifier Area, indicating Facility personnel may have been exposed to this material.

32. During the January 2017 Sampling, SESD took a solids sample (H04WAS) and a liquid sample (H04WAL) from the flooded WOX Wash Clarifier Area drain. The solids sample results indicated that the solids sample had concentrations of cadmium, lead, and zinc at levels exceeding the LDR treatment standards contained in 15A NCAC 13A.0112 [40 C.F.R. Part 268, Subpart D]. (See Exhibit 4).

PLINT Filter Plant /Truck Loading Area (100 Area)

33. During the January 2017 CDI, the inspectors observed storm water flooding the Truck Loading Area and piles of PLINT feed material (also known as Lead Chloride) had been released to and were present on the concrete surface around the PLINT Filter Plant Building and Truck Loading Area.

34. During the January 2017 Sampling, SESD took a solids sample (H03WAS) from the concrete surface in the PLINT Filter Plant Building/Truck Loading Area. The sample results indicated that the solids sample had concentrations of cadmium, lead, and zinc, some of the main constituents of EAF dust (K061), at levels exceeding the LDR treatment standards contained in 15A NCAC 13A.0112 [40 C.F.R. Part 268, Subpart D]. (See Exhibit 4).

35. During an August 13, 2018 NCDEQ visit, portions of the concrete paved Truck Loading Area located in the PLINT Filter Plant Building area were being removed, and Respondent planned for certain reconstruction of facilities in the area and replacement of the concrete pad.

Carbon Filter Tanks Decontamination Bay (200 Area)

36. During the August 2014 CEI/FCI, the inspectors observed a Decontamination Bay located in front of the Carbon Filter Tanks. The Decontamination Bay was used for equipment clean-out. At the time of the inspection, a pile of discarded carbon from the Carbon Filter Tanks was observed accumulating on the concrete pad inside the Decontamination Bay. Facility personnel indicated this discarded carbon would be loaded into roll-offs for disposal.

37. A sample of the discarded carbon collected from the Decontamination Bay and tested by Facility personnel using the Toxicity Characteristic Leaching Procedure (TCLP) yielded concentrations of lead, one of the main constituents of EAF dust (K061), at levels exceeding the LDR treatment standards contained in 15A NCAC 13A.0112 [40 C.F.R. Part 268, Subpart D].

Zinc Raffinate Area (200 Area)

38. During the October 2015 CEI, Facility personnel stated that in April 2015, a pipe rupture released a 30% sulfuric acid solution to the ground outside of the Zinc Raffinate Area secondary containment system. Respondent reportedly responded and stopped the release, excavated soil, and used a vacuum pump to remove residual liquids. Although the area was experiencing heavy rainfall, pH monitoring in the drainage channel was neutral.

39. Also during the October 2015 CEI, Facility personnel stated that in May 2015, a pipe rupture released depleted solution from the Zinc Raffinate Area to the secondary containment system, before overflowing to the ground and to a drainage channel. Facility personnel reported the release to the National Response Center as a sulfuric acid and zinc solution release (Incident Report # 1116915). Respondent reportedly neutralized the depleted solution released to the ground and removed the contaminated soil into roll-off containers in July 2015. During the October 2015 CEI, the inspectors observed roll-offs of hazardous and non-hazardous waste from the depleted solution spill present near the depleted solution area.

40. A total of four voluntary sampling events were performed at the Facility (May, June, August and September 2016) at the request of NCDEQ. Summary reports were submitted to NCDEQ for review. Following further discussions with NCDEQ, the Facility excavated and removed additional soil from the area. Following completion of soil removal, NCDEQ did not require further action to be taken, and remediation was complete.

Crud Press Area (200 Area)

41. During the October 2015 CEI, the inspectors observed outside the Crud Press Area building, one roll-off with a hazardous waste label that contained zinc organic concentrate filter cake waste and leach residue debris. The roll-off was covered; however some unknown mud was located on the base of the roll-off and on the concrete pavement beside it.

42. During the January 2017 CDI, the inspectors observed zinc organic concentrate (crud) residue released to the interior walls of the Crud Press Area building.

Melting/Casting/Alloying Area (500 Area)

43. The 500 Area consists of melting, alloying and casting furnaces and equipment. During the October 2015 CEI, the inspectors examined the Recirculation Tank (Cell House) and its secondary containment system. The inspectors observed the secondary containment area contained process liquids including electrolyte solution (a sulfuric acid solution) and storm water. In 2015, liquids from the Cell House basement seeped between the tank and the floor seal and entered the storm water drain system and were conveyed to the Storm Water Basin 1. According to Facility personnel, the leak was detected in a drain on September 5, 2015; however, after investigation the source was not discovered until September 8, 2015.

44. NCDEQ issued an Immediate Action Notice of Violation (Docket #2016-006) on October 28, 2015, requiring Respondent to conduct an evaluation of potential impacts to

environmental media. An investigation was conducted on January 25-26, 2016 to collect soil samples in proximity to the location where the release of process liquid to the subsurface had occurred. Results of the investigation were reviewed by NCDEQ, and it was concluded that no additional investigation or remediation was required.

West Ponds

45. During the August 2014 CEI/FCI and October 2015 CEI, inspectors observed four (4) ponds with synthetic liners located on the west side of the Facility process area, near the western property boundary, and one (1) other area where a former unlined pond was located during construction of the Facility. These lined West Ponds were identified as the (a) Depleted Solution Pond, (b) the Raffinate Pond, (c) the West Maintenance Pond, and (d) the West Storm Water Pond. The unlined West Pond was identified as the Old Construction Storm Water Pond. Facility personnel explained that the liquid separated from the zinc, acid and organic solvent solution at the Zinc Raffinate Area goes, via a green pipe, into the Raffinate Pond. Next was a West Maintenance Pond, which the inspectors observed to be accumulating orange colored water. The last pond was the West Storm Water Pond, equipped with geese deterrents. During both inspections, inspectors observed the West Storm Water Pond was lined for acidic organic solutions and contained acidic water with a red algae bloom. Facility personnel stated that the West Storm Water Pond acts as a catchall for the process areas, and that material in the West Storm Water Pond was generated from tank failures and coating failures in the process tanks.

46. During the October 2015 CEI, the inspectors observed the lined West Storm Water Pond contained solids deposited from the Facility storm drains. The solids were building up at the influent end of this pond. Storm water from the roads in the process area drains to the West Storm Water Pond. Process liquids from process secondary containment systems accumulated in the West Maintenance Pond, Raffinate Pond and Depleted Solution Pond before being placed back into the process.

47. During the January 2017 CDI, the inspectors observed the lined West Storm Water Pond was being used to accumulate approximately 1,700 tons of process material. Facility personnel indicated the process material was being accumulated for return to the process, but that issues developed preventing immediate re-processing. The inspection confirmed that all the West Ponds were connected via overflow pipes, with the West Storm Water Pond being the lowest grade in the series. The West Storm Water Pond also had a 24-inch to 36-inch (approx.) riser pipe which could allow discharge to a tributary. The inspectors observed residual material on the top of the riser pipe, indicating that the water level in the West Storm Water Pond may have been high enough to overtop the riser. Facility personnel stated the outfall was capped.

48. Outside of the fence of the West Storm Water Pond was the Old Construction Storm Water (unlined) pond that is no longer in use. Facility personnel indicated the influent to this pond was capped and sealed.

49. Next to the West Storm Water Pond was the West Maintenance Pond. The 200 Area discharges process solution into this West Maintenance Pond before being fed back into the 200 Area processes. Inspectors observed sludgy material and discolored water accumulating in this

lined West Maintenance Pond. The next two ponds observed were the Depleted Solutions Pond and the Raffinate Pond. Facility personnel indicated these lined ponds were used to temporarily accumulate materials that are recirculated back into the processes. All of the lined West Ponds were linked for emergency overflow. The inspectors observed erosion outside the fencing in an area adjacent to the Raffinate Pond.

50. NCDEQ noted in a January 20, 2017, email that the West Storm Water Pond collects storm water and routes the water to the manufacturing process. Process water, after use, is discharged under the Wastewater Permit NC0089109. Additionally, NCDEQ noted in the email that the domestic wastewater (from showers, restrooms, etc.) from the Facility is discharged via a pump station and sanitary sewer to the Riverstone Wastewater Treatment Plant (Industrial Wastewater Sanitary Permit NC0087084) on the other side of the Broad River. Concerns were raised regarding possible effects of fugitive dust from the Facility wash stations on operations of the Riverstone Wastewater Treatment Plant and its discharge permit requirements.

51. The analytical results for samples taken from the West Ponds during the January 2017 Sampling event (H06SD - Old Construction Pond, H07WAS - West Pond - Storm Water, H08WAL - West Pond - Maintenance, H08WAS - West Pond - Maintenance, H09WAL - West Pond - Raffinate, H09WAS - West Pond - Raffinate, and H10WAS - West Pond - Depleted Solution) indicated that the samples had concentrations of cadmium, lead, and/or zinc, some of the main constituents of EAF dust (K061), at levels which exceeded the LDR treatment standards contained in 15A NCAC 13A .0112 [40 C.F.R. Part 268, Subpart D].

52. In February 2018, an NCDEQ inspector observed that the West Maintenance Pond and West Storm Water Pond had been excavated, sediments removed and disposed of off-site; the primary pond liners had been removed then replaced by new liners in both ponds in late 2017.

East Ponds

53. During the January 2017 CDI, next to the WOX Wash Clarifier, the inspectors observed three (3) process ponds with synthetic liners, known as the East Ponds. Facility personnel explained that the lined East Maintenance Pond received flow from the secondary containment systems associated with process operations on the east portion of the Facility, and the lined East Storm Water Pond received flow from the bleed treatment process. The Facility further explained that the lined East Storm Water Pond was being used as a process pond temporarily. The East Effluent Pond was used to hold process water prior to discharge to the river. In February 2018, the East Maintenance Pond and East Storm Water Pond were removed to make room for new process equipment and the East Effluent Pond was reconstructed to create two separate lined ponds, one to hold storm water and the other process effluent water prior to discharge to the river.

54. In February 2018, Respondent reportedly cleaned out the sediments and process materials above the liners in each of the East Ponds in preparation for reconstruction of the area, shipping some of the material to Rockwood, Tennessee, and sending the rest to a hazardous waste landfill. On February 20, 2018 and February 26, 2018, Respondent sampled the soil and sediment as related to an incident that occurred while sediment removal activities were being performed in the Facility's East Pond area. After removal of affected surface soil, samples of the soil surface were

obtained and analyzed. Following submittal of analytical information to NCDEQ, construction activities in the area were continued.

55. Prior to the removal of the ponds, Respondent sampled both the sediments above the East Maintenance Pond liner and the liners themselves. The liners and sediments were determined to be hazardous waste. In addition, Respondent managed the contaminated East Storm Water Pond liner as hazardous waste. Based on the analytical sample results, NCDEQ requested that soil samples be collected below the liners of the East Maintenance Pond and East Storm Water Pond.

56. Analysis of the sediment samples collected below the liners by Respondent as described in Paragraph 55 above, at the request of NCDEQ, for the East Maintenance Pond and East Storm Water Pond indicated concentrations of cadmium, lead, and/or zinc, some of the main constituents of EAF dust (K061), at levels which exceeded the LDR treatment standards contained in 15A NCAC 13A .0112 [40 C.F.R. Part 268, Subpart D]. (See Exhibit 1). These results were below the North Carolina Preliminary Soil Remediation Goals (PSRG) industrial soil cleanup standards.

Storm Water Basin 1

57. During the October 2015 CEI, the inspectors observed Respondent was removing sediment from Storm Water Basin 1 and placing the material into four (4) hazardous waste roll-off containers.

58. During the January 2017 CDI, the inspectors observed that Storm Water Basin 1 consists of a concrete Skimmer Pond Energy Dissipater basin, an earthen unlined basin that curves in a U-loop to the two skimmers, and a concrete housing prior to the 54-inch discharge pipe to the Broad River. Facility personnel indicated Storm Water Basin 1 is used to collect storm water and sediments carried by stormwater originating from the east portion of the Facility. The inspectors noted the buildup of solids in the Skimmer Pond Energy Dissipater basin and the earthen unlined basin.

59. During the January 2017 Sampling, SESD collected two sediment samples (H12WAS and H14WAS) from Storm Water Basin 1. One solids sample was taken from the Storm Water Basin 1 outlet, and the second solids sample was taken from the Skimmer Pond Energy Dissipater basin. The analytical sample from the Energy Dissipater basin indicated that the solids had concentrations of cadmium, lead, and zinc, some of the main constituents of EAF dust (K061), at levels exceeding the LDR treatment standards contained in 15A NCAC 13A .0112 [40 C.F.R. Part 268, Subpart D].

Effects on Human Health and the Environment:

60. The hazardous wastes and/or hazardous constituents that have been identified at the Facility may pose a substantial hazard to human health or the environment. These hazardous wastes and/or hazardous constituents include, but are not limited to, the following:

61. Cadmium, CAS ID #: 7440-43-9: Cadmium is a natural element in the earth's crust. It is usually found as a mineral combined with other elements such as oxygen (cadmium oxide),

chlorine (cadmium chloride), or sulfur (cadmium sulfate, cadmium sulfide). Exposure to cadmium may affect the heart and blood vessels (cardiovascular system), organ development, the digestive system (gastrointestinal), the nervous system (neurological), the urinary system or kidneys (renal), the reproductive system, and the respiratory system (from the nose to the lungs). Cadmium is a known human carcinogen.

62. Chromium, CAS ID #: 7440-47-3: Chromium is a naturally occurring element found in rocks, animals, plants, soil, and in volcanic dust and gases. Chromium is present in the environment in several different forms. The most common forms are Chromium(0), Chromium(III), and Chromium(VI). No taste or odor is associated with chromium compounds. Chromium(III) occurs naturally in the environment and is an essential nutrient. Chromium(VI) and Chromium(0) are generally produced by industrial processes. Chromium(VI) and Chromium(III) are used for chrome plating, dyes and pigments, leather tanning, and wood preserving. Exposure to chromium may affect the immune system (immunological), urinary system or kidneys (renal), and the respiratory system (from nose to the lungs). Chromium is a known human carcinogen.

63. Lead, CAS ID #: 7439-92-1: Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. However, when found in the environment, it usually originates from human activities including the burning of fossil fuels, mining, and manufacturing. Exposure to lead may affect the heart and blood vessels (cardiovascular), organ development, the digestive system (gastrointestinal), the formation of blood (hematological), muscles and skeleton (musculoskeletal), the nervous system (neurological), the eyes (ocular), urinary system or kidneys (renal), and the reproductive system. Exposure to lead can occur from breathing workplace air or dust. Children can be exposed from playing in contaminated soil.

64. Zinc, CAS ID #: 7440-66-6: Exposure to zinc may affect the digestive system (gastrointestinal), the formation of blood (hematological), and the respiratory system (from the nose to the lungs). Exposure to zinc can also cause stomach cramps, anemia, and changes to cholesterol levels

Exposure Pathways

65. The hazardous wastes and/or hazardous constituents described above were detected in some or all the solids and liquid samples taken during the January 2017 Sampling.

66. Approximately 40 employees work at the Facility, which is staffed 10 hours a day, seven days a week. In addition, there are contractors and delivery people on-site at the Facility frequently.

67. The Broad River is approximately 250 feet from the Facility's Storm Water Basin 1 storm water discharge and appears to be at a lower elevation than Basin 1. The Facility maintains the following NPDES storm water discharge permit: Individual Industrial Stormwater Discharge Permit NCS000562.

68. Potential pathways of exposure to soil, ground/surface water, and air contaminants in the on-site industrial setting include: the direct inhalation of hazardous waste and/or hazardous constituents released from the Facility into the air, and dermal absorption of air particles containing

hazardous waste constituents; from ponds or basins containing hazardous waste and/or hazardous constituents and contaminated water, and from saturated topsoil. Receptors in this industrial setting include adults, such as on-site employees and contractors, other adults that may be engaged in business on-site, and wildlife (such as birds landing in Basin 1).

69. Potential pathways of exposure to air and ground/surface water contaminants in the residential setting adjacent to the Facility include: the direct inhalation of hazardous waste and/or hazardous constituents released from the Facility into the air, and dermal absorption of air particles containing hazardous waste constituents; from saturated topsoil; and from the ingestion of contaminated surface water potentially caused by off-site migration of hazardous waste and/or hazardous constituents into the nearby river, and dermal absorption of contaminated water in the nearby river. Potential receptors in this residential setting include adults, children, family pets, and wildlife.

70. The 160-acre Facility is located on the western side of the city of Mooresboro, North Carolina. According to the 2010 US Census, the City of Mooresboro land area consists of 1.77 square miles with a population of 311 people, including 88 students, and 128 homes.

V. DETERMINATIONS AND CONCLUSIONS OF LAW

71. Respondent's Facility is a "facility or site" within the meaning of Section 3013(a) of RCRA, 42 U.S.C. § 6934(a).

72. Respondent is a "person" as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).

73. Respondent is an "owner" and "operator" of the Facility within the meaning of Section 3013(a) of RCRA, 42 U.S.C. § 6934(a).

74. Section 1004(27) of RCRA, 42 U.S.C. § 6903(27) defines the term "solid waste" to mean "any garbage, refuse ... and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations...."

75. Section 1004(5) of RCRA, 42 U.S.C. § 6903(5) defines the term "hazardous waste" to mean:

a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

A. cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

B. pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

76. Pursuant to 15A NCAC 13A.0106(a) [40 C.F.R. § 261.2], a "solid waste" is any discarded material that is not excluded under 15A NCAC 13A.0106(a) [40 C.F.R. § 261.4(a)] or that is not excluded under a variance under 15A NCAC 13A.0103(c) [40 C.F.R. §§ 260.30 and 260.31] or that is not excluded by a non-waste determination under 15A NCAC 13A.0103(c) [40 C.F.R. §§ 260.30 or 260.34]. A discarded material includes any material that is abandoned by being stored in lieu of being disposed 15A NCAC 13A.0106(a) [40 C.F.R. § 261.2]. Pursuant to 15A NCAC 13A.0106(a) [40 C.F.R. § 261.3], a solid waste is a "hazardous waste" if it is listed in 15A NCAC 13A.0106(d) [40 C.F.R. Part 261, Subpart D] or meets any of the criteria set forth in 15A NCAC 13A.0106 (a) [40 C.F.R. § 261.3(a)(2)].

77. Pursuant to 15A NCAC 13A.0106(d) [40 C.F.R. § 261.30], a solid waste is a "hazardous waste" if it is listed in 15A NCAC 13A.0106(d) [40 C.F.R. Part 261, Subpart D], unless it has been excluded from this list under 15A NCAC 13A.0103 [40 C.F.R. §§ 260.20 and 260.22].

78. Pursuant to 15A NCAC 13A.0106(d) [40 C.F.R. § 261.32], emission control dust/sludge from the primary production of steel in electric furnaces, electric arc furnace (EAF) dust, is a listed hazardous waste with Hazardous Waste Number K061. According to 15A NCAC 13A.0106(m) [Appendix VII of 40 C.F.R. Part 261], EAF dust (K061) contains the following hazardous constituents: hexavalent chromium, lead, and cadmium.

79. Pursuant to 15A NCAC 13A.0103(c) [40 C.F.R. § 260.31(c)], requests for a variance from the classification as solid waste may be granted for hazardous secondary materials that have been partially reclaimed, but must be reclaimed further before recovery is completed, if the partial reclamation has produced a commodity-like material and the criteria of 15A NCAC 13A.0103(c) [40 C.F.R. § 260.31(c)] are satisfied.

80. Pursuant to 15A NCAC 13A.0106(c) [40 C.F.R. § 261.20], a solid waste that exhibits any of the characteristics identified in 15A NCAC 13A.0106(c) [40 C.F.R. §§ 261.20-24] is a "characteristic hazardous waste" and is provided with the EPA Hazardous Waste Numbers D001 through D043.

81. Pursuant to 15A NCAC 13A.0106(c) [40 C.F.R. § 261.21(b)], a solid waste that exhibits the characteristic of corrosivity is a hazardous waste and is identified with the EPA Hazardous Waste Number D002. The Area 200 stripping stage at the Mooresboro Facility strips out the zinc content from the WOX using an acidic aqueous solution identified with Hazardous Waste Number D002 when discarded. When the process has an operational error or process issue upset, the acidic aqueous solution is released to the secondary containment and the storm water ponds.

82. Pursuant to 15A NCAC 13A.0106(c) [40 C.F.R. § 261.24], a solid waste that exhibits the characteristic of toxicity for cadmium is identified with the EPA Hazardous Waste Number D006. Pursuant to 15A NCAC 13A.0106(c) [40 C.F.R. § 261.24], a solid waste that exhibits the characteristic of toxicity for chromium is identified with the EPA Hazardous Waste Number D007. Pursuant to 15A NCAC 13A.0106(c) [40 C.F.R. § 261.24], a solid waste that exhibits the characteristic of toxicity for lead is identified with the EPA Hazardous Waste Number D008. Pursuant to 15A NCAC 13A.0106(c) [40 C.F.R. § 261.24], a solid waste that exhibits the

characteristic of toxicity for silver is identified with the EPA Hazardous Waste Number D011. When discarded, WOX is characteristically hazardous for cadmium, chromium, lead, and silver.

83. Pursuant to 15A NCAC 13A.0112(d) [40 C.F.R. § 268.40], a prohibited waste may only be land disposed if all the hazardous constituents found in the waste are at or below the appropriate treatment standards. Under the LDR treatment standards contained in 15A NCAC 13A .0112 [40 C.F.R. Part 268, Subpart D], hazardous waste carrying the code K061 is a prohibited waste and can only be land disposed if it meets the appropriate restrictions. Before it can be land disposed, the K061 listed waste must be treated for the following hazardous constituents: antimony, arsenic, barium, beryllium, cadmium, chromium (total), lead, mercury, nickel, selenium, silver, thallium, and zinc.

84. Based on the foregoing Findings of Fact, and pursuant to Section 3013(a) of RCRA, 42 U.S.C. § 6934(a), the EPA has hereby determined that Respondent owned and operated the Facility at which hazardous wastes were present and released.

85. Based on the foregoing Findings of Fact, and pursuant to Section 3013(a) of RCRA, 42 U.S.C. § 6934(a), the EPA has hereby determined that there may be a substantial hazard to human health or the environment due to the presence or release of hazardous wastes at or from the Facility as a direct result of Respondent's hazardous waste activities.

86. The EPA has further determined that Respondent, as owner and operator of the Facility, is the party responsible for conducting the actions ordered herein, which are necessary to ascertain the nature and extent of the hazard to human health or the environment.

VI. ORDER

87. Based on the Findings of Fact and Determinations and Conclusions of Law, Respondent consents to and is hereby ordered, pursuant to Section 3013(a) of RCRA, 42 U.S.C. § 6934(a), to submit written proposals and to perform the following Work in the manner and by the dates specified herein, for carrying out monitoring, testing, analysis, and reporting to ascertain the nature and extent of the hazards posed by the hazardous wastes and/or hazardous constituents that are present at, or that may have been released from, Respondent's Facility. Respondent consents to and is hereby ordered to implement such work proposals once approved, or modified and approved, by the EPA, in accordance with the approved terms and schedules.

88. Such written work proposals shall be specific and shall include, but are not limited to, performing the following:

- a. Within thirty (30) calendar days of the effective date of this Consent Order, Respondent shall submit for EPA review and approval an Initial Site Review Work Plan (ISR Work Plan). The objective of the ISR Work Plan shall be to identify confirmed or potential releases of hazardous wastes and/or hazardous constituents from Respondent's Facility through a comprehensive, non-invasive evaluation, and to assist in focusing the Sampling and Analysis Work Plan to be prepared pursuant to Paragraph 88(c) below. The ISR Work Plan shall provide for the following elements:

- i. a description of past and present manufacturing and waste management practices, by unit or area, taking into account the release and sampling history described in this Consent Order and any changes that have been implemented to the design and construction of Respondent's Facility;
 - ii. a review of relevant information, including but not limited to environmental permits and applications, data from sampling of structures and environmental media, reports of prior site investigation and remediation activities, records related to manufacturing processes and hazardous waste management, maps, design and construction drawings, aerial photographs, and environmental record databases;
 - iii. interviews with individuals having relevant knowledge;
 - iv. a visual reconnaissance of Respondent's Facility;
 - v. a preliminary review of potential environmental receptors, including identifying potable and industrial wells, surface water bodies, and groundwater flow direction;
 - vi. preparation of base maps depicting the original construction of Facility features and any significant changes to those features, which shall be provided to EPA and NCDEQ prior to the site visit referenced in Paragraph 88(a)(vii) below; and
 - vii. scheduling of a site visit with Respondent, EPA, and NCDEQ to walk the Facility, provide orientation regarding the manufacturing process and location of past and present Facility features, and discuss tentative findings of the Initial Site Review.
- b. Within 60 days of the EPA's approval of the ISR Work Plan, Respondent shall prepare an ISR Report for EPA review and approval, which shall describe the results of the ISR Work Plan implementation in narrative and tabular form with relevant map(s), and which shall address each element identified in the approved ISR Work Plan. For each unit or area identified as having confirmed or potential releases of hazardous wastes and/or hazardous constituents, the ISR Report shall include a discussion of past manufacturing or waste management practices at the unit or area, and all available information pertaining to the unit's operation, construction and process materials or wastes managed, as well as the nature of any release or potential release (e.g., media affected, hazardous waste and/or constituents released, magnitude of release, unit diagrams or engineering drawings, and photographs of the unit's ancillary equipment).
- c. Within thirty (30) calendar days following EPA's approval of the ISR Report, Respondent shall submit for EPA review and approval a Sampling and Analysis Work Plan (S&A Work Plan) to determine the nature and extent, horizontally and vertically, of air, soil, surface water, sediment, and groundwater contamination at the Facility. The S&A Work Plan shall be designed to determine the presence, magnitude, extent, direction, and rate of movement of any hazardous waste and hazardous constituents within the Facility boundaries. The S&A Work Plan design shall focus on units or areas at Respondent's

Facility with confirmed or potential releases of hazardous wastes and/or hazardous constituents as identified in the approved ISR Report, and shall include a phased approach initially addressing on-site sampling and analysis. Off-site surveys, inventories, and sampling shall be conducted if the results of the on-site sampling and analysis indicate that contamination has migrated, or may potentially migrate, beyond the Facility's boundaries. The S&A Work Plan shall document the procedures Respondent shall use to conduct those activities necessary to: (1) characterize the potential pathways of contaminant migration of hazardous waste and/or hazardous constituents; (2) characterize the source(s) of hazardous waste and/or hazardous constituent contamination; (3) define the degree and extent of hazardous waste and/or hazardous constituent contamination; and (4) identify actual or potential human and/or ecological receptors.

- i. The S&A Work Plan shall include, but not be limited to, the following on-site areas which may have been used for the generation, treatment, storage, or disposal of hazardous constituents or hazardous wastes at any time to the extent identified by the approved ISR Report as having confirmed or potential releases of hazardous wastes and/or hazardous constituents: storage, process or manufacturing areas, suspected source areas, spills, maintenance activities, industrial sewer lines, septic tanks, underground storage tanks, current and former landfill areas, storm water and non-process water ditches and ponds, ditches associated with any Facility NPDES outfall, Basin 1, Broad River and tributaries to Broad River, surface water and drainage ditches leaving the Facility property (such as the East and West Storm Water Ponds discharge to Basin 1), and any and all other areas that may have been impacted by the presence or release of hazardous waste and/or hazardous constituents through air deposition, soil deposition, surface water and sediment run-off, and/or groundwater migration. The S&A Work Plan shall include a map outlining the Facility property and the location of the areas.
- ii. The S&A Work Plan shall contain screening levels, which are health-based or environmental-based concentrations of hazardous constituents determined to be indicators for the protection of human health and/or the environment, based on the latest EPA guidance for each hazardous constituent identified below.

In addition, North Carolina has established Groundwater Protection Standards (GPSs) for certain constituents detected in groundwater. The GPS for each hazardous constituent should be set at one of the following:

- a. The background level of that constituent in the groundwater, or
- b. The NC 2L Groundwater Quality Standard or interim maximum allowable concentration (IMAC) as established in 15A NCAC 2L .0202.

Please note that 15A NCAC 2L .0202(c) states "... substances which are not naturally occurring and for which no standard is specified shall not be permitted in concentrations at or above the practical quantitation limit..."

iii. The S&A Work Plan shall, at a minimum, include the following components:

- a. Sampling Design: The S&A Work Plan shall designate the waste and/or environmental media sampled, the number of samples, the types of samples (composite or grab), and the depths within each location at which the samples will be taken.
- b. Groundwater: The S&A Work Plan shall include a groundwater monitoring plan and schedule to characterize groundwater quality, both vertically and horizontally, beneath the Facility and groundwater which may be migrating from the Facility. To do so, the S&A Work Plan shall include a section providing for an inventory of all wells on the Facility, and a schedule for the sampling of all onsite wells that based on the approved ISR Report may be impacted by hazardous wastes and/or hazardous constituents that are present at, or that may have been released from features including but not limited to: secondary containment systems; ponds; and storm water drains at Respondent's Facility. In addition, monitoring wells shall be installed and sampled for areas where, based on the approved ISR Report, any suspected releases of hazardous waste and/or hazardous constituents may have occurred and where wastes have been placed or stored on the ground.
- c. Surface Water and Sediment: The S&A Work Plan shall include a section providing for a survey, sampling, and analysis of surface water and sediment in and around any wetlands, creeks, lakes, ponds, ditches, or other surface water bodies identified by the approved ISR Report as having been impacted or potentially impacted by confirmed or potential releases of hazardous wastes and/or hazardous constituents. The S&A Work Plan shall designate the number, the locations, and the depths at which the samples will be taken.
- d. Soil: The S&A Work Plan shall include a section providing for a survey, sampling, and analysis of soils located on the Facility that based on the approved ISR Report may be impacted by hazardous wastes and/or hazardous constituents that are present at, or that may have been released from Respondent's Facility. The S&A Work Plan shall designate the areas to be sampled, the number of samples and the depths at which the samples will be taken.
- e. Air: The S&A Work Plan shall include a section providing for a survey, sampling, and analysis of ambient air located on the Facility that based on the approved ISR Report may be impacted by hazardous wastes and/or hazardous constituents that are present at, or that may have been released from Respondent's Facility. The S&A Work Plan shall designate the areas to be sampled based on the results of the approved ISR Report, prevalent wind directions and air modeling and deposition modeling, potential contaminants of concern, air methods to be employed, the number of samples and the timeframes the samples will be taken.

- f. The S&A Work Plan shall include Quality Assurance Project Plan (QAPP) for collecting, identifying and evaluating the scientific data collection and analysis including data validation and corrective action.

89. All work plans submitted to the EPA pursuant to this Consent Order shall include a detailed schedule for all work to be performed, as well as a schedule for submission of progress reports, draft reports, and final reports. The final Sampling and Analysis Report shall define the nature, location, extent, direction, and rate of movement of any hazardous wastes and/or hazardous constituents identified at or released from the Facility. The final Sampling and Analysis Report shall also summarize all actions taken to comply with this Consent Order.

90. Upon the EPA's approval of any work plan, Respondent shall begin implementation of such work plan within fifteen (15) calendar days.

91. The EPA's technical representatives will be available to Respondent for guidance and direction during all phases of the investigation process, including development of all work plans, implementation of field activities, evaluation of environmental data, and development of draft and final reports.

92. Unless otherwise approved by the EPA, laboratory analysis of all samples shall be for total metals, TCLP metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), semivolatile organic compounds (SVOCs), Polyaromatic Hydrocarbons (PAHs), dioxins, furans, pH and any other constituent from Appendix VIII of 40 C.F.R. Part 261 or Appendix IX of 40 C.F.R. Part 264 not identified herein but which may have been released or which may be present at the Facility. With EPA approval, the results of laboratory analysis may be used to define a subset of constituents of concern (COCs) to be utilized for subsequent laboratory analysis.

93. All work plans submitted pursuant to this Consent Order shall include a Project Management Plan, which shall list the names and qualifications of project personnel, and a Health and Safety Plan, which shall ensure the protection of workers and the public during the performance of all Work under this Consent Order. The Health and Safety Plan shall be consistent with the EPA's "Standard Operating Safety Guides" (PUB 9285.1-03, PB 92-963414, June 1992) and OSHA regulations at 40 C.F.R. Part 1910.

94. All Work undertaken pursuant to this Consent Order shall be developed and performed in a manner consistent with RCRA and its implementing regulations and all relevant EPA guidance documents. Furthermore, all Work conducted in accordance with this Consent Order will reference and comply with approved EPA procedures and protocols for all sampling and analyses. All monitoring results and data shall be submitted to the EPA in accordance with the format specified in the EPA Region 4 "RCRD Data Management and Electronic Data Deliverables (EDD) Policy" (June 21, 2016). Reporting of groundwater monitoring results shall, at a minimum, include well construction details, water level contours, contaminant trend graphs, and plume concentration diagrams. All analytical detection limits for constituents identified in the work plans referenced above must be below the appropriate human health and/or ecological risk-based limit. At their

discretion, implementation of all field work specified in the work plans may be overseen by EPA personnel.

95. As outlined in this Consent Order, Respondent shall submit copies of all work plans and reports described in the preceding paragraphs to the EPA consistent with the timelines in this Consent Order or in any approved work plan. Electronic submittals may be made electronically on the due date, provided that the hard copies shall be placed in overnight delivery on the same day.

96. Unless otherwise specified, any work plans, reports, or other deliverables that are required to be submitted under this Consent Order shall be in writing and shall be hand delivered, sent by certified mail, return receipt requested, by overnight express mail, or by e-mail to the following EPA representatives:

Two (2) hard copies and one (1) electronic copy to:

John E. Johnston, Project Coordinator
RCRA Corrective Action Section
RCRA Programs and Cleanup Branch
Land, Chemical and Redevelopment Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
Johnston.John@epa.gov

One (1) electronic copy to:

Keriema Newman, Chief
RCRA Corrective Action Section
RCRA Programs and Cleanup Branch
Land, Chemical and Redevelopment Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
Newman.Keriema@epa.gov

Jeff Menzel
Hazardous Waste Section
Division of Waste Management
PO Box 117
Black Mountain, NC 28711
Jeff.Menzel@ncdenr.gov

97. Any variance from the approved terms and schedules contained in any approved work plan, or any monitoring, testing, analysis, or reporting conducted by Respondent without an

approved work plan, may be determined to be unsatisfactory to the EPA, and subject Respondent to the potential consequences identified in Section XVI (Delay in Performance/Stipulated Penalties).

VII. ADDITIONAL WORK

98. The EPA may determine that additional monitoring, testing, analysis, and/or reporting is necessary to ascertain the nature and extent of any hazard to human health or the environment which may be presented by the presence or release of hazardous wastes or hazardous constituents at the Facility. If the EPA determines that such additional work is necessary, the EPA will notify Respondent in writing and specify the basis for its determination that additional work is necessary. Within fifteen (15) calendar days after the receipt of such determination, Respondent shall have the opportunity to meet or confer with the EPA to discuss the additional work. If required by the EPA, Respondent shall submit for EPA approval a work plan for the additional work. The EPA will specify the contents of such work plan. Such work plan shall be submitted by Respondent within thirty (30) calendar days of receipt of the EPA's determination that additional work is necessary, or according to an alternative schedule established by the EPA. Respondent shall implement such work plan within fifteen (15) calendar days of the EPA's approval.

VIII. MINIMUM QUALIFICATIONS FOR PERSONNEL

99. All Work performed by Respondent pursuant to this Consent Order shall be under the direction and supervision of an individual who has demonstrated expertise in hazardous waste site investigation. As part of Respondent's Project Management Plan, required pursuant to Paragraph 93 above, before any work is performed, Respondent shall submit to the EPA, in writing, the name, title, and qualifications of the supervisory personnel and of any contractors or subcontractors to be used in carrying out the terms of this Consent Order. Additionally, Respondent shall ensure that when a license is required, only licensed individuals shall be used to perform any Work required by this Consent Order.

IX. SUBMISSIONS/EPA REVIEW

100. The EPA will review all written proposals, work plans, draft and final reports, and any other documents required to be submitted under this Consent Order (submissions), with the exception of progress reports. The EPA may: (a) approve the submission; (b) approve the submission with modifications; (c) disapprove the submission and direct Respondent to resubmit the document after incorporating the EPA's comments; or (d) disapprove the submission and assume responsibility for performing all or any part of the Work. The EPA may also approve, modify, or disapprove a portion of a submission. As used in this Consent Order, the terms "approval by the EPA," "EPA approval," or a similar term means the action described in (a) or (b) of this paragraph. Such disapproval shall not be subject to the dispute resolution procedures of Section XVII (Dispute Resolution), except as set forth in Paragraph 102 below.

101. Prior to the EPA's written approval, with or without modifications, no written proposal, work plan, report, or other submission shall be construed as approved and final. Oral advice, suggestions, or comments given by the EPA representatives will not constitute approval, nor shall any oral approval or oral assurance of approval be considered as binding.

102. Upon receipt of a notice of disapproval or a request for a modification issued by the EPA, Respondent shall, within fifteen (15) calendar days, or such longer time as specified by the EPA in its notice of disapproval or request for modification, correct the deficiencies, and resubmit the work plan, report, specification, schedule, or other submission in accordance with the EPA's written comments. Notwithstanding the notice of disapproval, or approval with modifications, Respondent shall proceed, at the direction of the EPA, to take any action required by any approved portion of the submission. Revised submittals are also subject to EPA approval, approval with conditions and/or modifications, or disapproval. Any revised submittal that is not approved or is not approved with conditions and/or modifications is considered noncompliant with the terms of this Consent Order. In the event the EPA disapproves a revised submission, Respondent may invoke the dispute resolution procedures of Section XVII (Dispute Resolution). Any submission approved or revised by the EPA or upheld through dispute resolution under this Consent Order shall be deemed incorporated into and made an enforceable part of this Consent Order.

103. If, after providing Respondent with the opportunity to correct and resubmit any submittal required under this Consent Order, the EPA determines that the submittal still fails to meet the technical or administrative requirements of this Consent Order or applicable regulations, the EPA may modify the submission with the EPA's comments and finalize and approve the document for implementation by Respondent.

104. Within fifteen (15) calendar days following EPA approval of a submission or portion thereof, Respondent shall begin implementation of such approved document or portion.

105. All written proposals, work plans, reports, and/or other submissions required by this Consent Order are, upon approval by the EPA (including modification and approval), incorporated into this Consent Order. Any noncompliance with such EPA-approved written proposals, work plans, reports, specifications, schedules, and other submissions shall constitute noncompliance with this Consent Order. Oral advice or approvals given by EPA representatives shall not relieve Respondent of its obligation to obtain formal, written approvals required by this Consent Order.

106. In all instances in which this Consent Order requires written submissions to be submitted to the EPA, each submission must be signed by a "responsible official," such as a president, vice president, secretary, or treasurer of the corporation in charge of a principal business function, or any other person who performs similar decision-making functions for the corporation or the Facility.

107. In all instances in which this Consent Order requires written submissions to the EPA, each submission must be accompanied by the following certification signed by a responsible official:

"I certify that the information contained in and accompanying this submission is true, accurate, and complete. As to those identified portions of this submission for which I cannot personally verify the truth and accuracy, I certify as the facility official having supervisory responsibility for the person who, acting upon my direct instructions, made the verification, that this information is true, accurate, and complete."

Signature: _____

Name: _____

Title: _____

X. QUALITY ASSURANCE/QUALITY CONTROL

108. All sampling undertaken pursuant to this Consent Order shall be performed in accordance with the EPA-approved terms and schedules, and in a manner consistent with the EPA's "Field Branches Quality System and Technical Procedures," which is available at <https://www.epa.gov/quality/quality-system-and-technical-procedures-lsasd-field-branches>.

109. Respondent shall follow EPA guidance for sampling and analysis. As part of Respondent's S&A Work Plan and pursuant to Paragraph 88, Respondent shall develop a Quality Assurance Project Plan (QAPP) for all sampling and analysis conducted under this Consent Order. The QAPP shall be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, Mar. 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/240/R 02/009, Dec. 2002), and subsequent amendments to such guidelines upon notification by EPA to Respondent of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Work plans shall contain quality assurance/quality control (QA/QC) and chain of custody procedures for all sampling, monitoring, and analytical activities. Any deviations from the QA/QC and chain of custody procedures in approved work plans must be approved by the EPA prior to implementation; must be documented, including the reasons for the deviations; and must be reported in the applicable report.

110. The name(s), address, telephone number, and contact person of each analytical laboratory Respondent proposes to use must be specified in the applicable work plan(s).

111. All work plans required under this Consent Order shall include data quality objectives for each data collection activity to ensure that data of known and appropriate quality are obtained, and that data are sufficient to support their intended use(s). Guidance on data quality objectives can be found in the February 2006 "U.S. EPA Guidance for the Data Quality Objective Process," available at <https://www.epa.gov/sites/production/files/2015-06/documents/g4-final.pdf>.

112. Respondent shall monitor to ensure that high quality data is obtained by its consultant(s) or contract laboratories. Respondent shall ensure that laboratories used by Respondent for analysis perform such analysis according to the latest approved edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), or other methods deemed satisfactory to the

EPA. If methods other than the EPA methods are to be used, Respondent shall specify and submit all such protocols for EPA approval in the applicable work plan. The EPA may reject any data that does not meet the requirements of the approved work plan, or the EPA analytical methods, and may require resampling and additional analysis.

113. Respondent shall ensure that the laboratories it uses for analyses participate in a QA/QC program equivalent to that which is followed by the EPA. For each proposed analytical method and analyte, the laboratory shall be certified for each method and analyte. The EPA may conduct a performance and QA/QC audit of each laboratory chosen by Respondent before, during, or after sample analyses. Upon request by the EPA, Respondent shall have its laboratory perform analyses of samples provided by the EPA to demonstrate laboratory performance. If the audit reveals deficiencies in a laboratory's performance or QA/QC, resampling and additional analysis may be required.

XI. PROJECT COORDINATOR

114. The EPA hereby designates as its Project Coordinator:

John E. Johnston, Project Coordinator
RCRA Corrective Action Section
RCRA Programs and Cleanup Branch
Land, Chemical and Redevelopment Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
404-562-8458
Johnston.John@epa.gov

115. Within ten (10) calendar days of Respondent's receipt of this Consent Order, Respondent shall designate a Project Coordinator and submit the designated Project Coordinator's name, address, and telephone number in writing to the EPA.

116. Each Project Coordinator shall, on behalf of the party that designated him/her, oversee the implementation of this Consent Order and function as the principal project contact.

117. Respondent shall provide the EPA with a written notice of any change in its Project Coordinator. Such notice shall be provided at least seven (7) calendar days prior to the change in Project Coordinator.

XII. SAMPLING AND DATA/DOCUMENT AVAILABILITY

118. Respondent shall submit to the EPA the results of all sampling and/or tests or other data generated by, or on behalf of, Respondent pursuant to the requirements of this Consent Order and the Exhibits appended hereto and incorporated herein.

119. At the request of the EPA, Respondent shall provide or allow the EPA or its authorized representatives to take, split, and/or duplicate samples of all samples collected by Respondent pursuant to this Consent Order. Respondent shall notify the EPA fifteen (15) calendar days prior to collection of any samples.

120. Nothing in this Consent Order shall limit or otherwise affect the EPA's authority to collect samples pursuant to applicable law, including, but not limited to, RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

XIII. ON-SITE AND OFF-SITE ACCESS

121. Respondent shall provide access at all reasonable times to the Facility and to all records and documentation relating to conditions at the Facility and the activities conducted pursuant to this Consent Order to the EPA and its employees, contractors, agents, consultants, and representatives. These individuals shall be permitted to move freely at the Facility in order to conduct activities which the EPA determines necessary.

122. To the extent that activities required by this Consent Order, or by any approved work plans prepared pursuant hereto, must be done on property not owned or controlled by Respondent, Respondent will use its best efforts to obtain site access agreements in a timely manner from the present owners of such property. Best efforts, as used in this paragraph, shall include the payment of reasonable compensation in consideration of granting access. Respondent shall ensure that the EPA's Project Coordinator has a copy of any access agreements.

123. Nothing in this Consent Order limits or otherwise affects the EPA's right of access and entry pursuant to applicable law, including, but not limited to, RCRA and CERCLA.

XIV. RECORD PRESERVATION

124. Respondent shall retain, during the pendency of this Consent Order and for a minimum of five (5) years after its termination, a copy of all data, records, and documents now in its possession or control, or in the possession or control of its contractors, subcontractors, representatives, or which come into the possession or control of Respondent, its contractors, subcontractors, or representatives, which relate in any way to this Consent Order. Respondent shall notify the EPA, in writing, at least ninety (90) calendar days in advance of the destruction of any such records and shall provide the EPA with the opportunity to take possession of any such records. Such written notification shall reference the caption, docket number and date of issuance of this Consent Order and shall be addressed to the EPA, as follows:

Keriema Newman, Chief
RCRA Corrective Action Section
RCRA Programs and Cleanup Branch
Land, Chemical and Redevelopment Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

Additionally, Respondent shall provide data, records and documents retained under this Section at any time before the expiration of the five (5) year period at the written request of the EPA.

XV. INFORMATION SUBMITTED TO THE EPA

125. Any information that Respondent is required to provide or maintain pursuant to this Consent Order is not subject to the Paperwork Reduction Act of 1995, 44 U.S.C. § 3501 et seq.

126. Respondent may assert a business confidentiality claim in the manner described in 40 C.F.R. § 2.203(b) covering all or part of any information submitted to the EPA pursuant to this Consent Order. In accordance with 40 C.F.R. § 2.204(e)(4), any assertion of confidentiality shall be adequately substantiated by Respondent when the assertion is made. Information submitted for which Respondent has asserted a claim of confidentiality as specified above shall be disclosed by the EPA only to the extent and manner permitted by 40 C.F.R. Part 2, Subpart B. If no such confidentiality claim accompanies the information when it is submitted to the EPA, the information may be made available to the public by EPA without further notice to Respondent. Respondent agrees not to assert any confidentiality claim with respect to any physical, sampling, monitoring, or analytical data.

XVI. DELAY IN PERFORMANCE/STIPULATED PENALTIES

127. Unless there has been a written modification of a compliance date by the EPA, or excusable delay as described in Section XIX (*Force Majeure*), in the event that Respondent fails to comply with any requirement set forth in this Consent Order, Respondent shall pay stipulated penalties, as set forth below, upon receipt of a written demand by the EPA.

128. Compliance by Respondent shall include commencement or completion, as deemed appropriate by the EPA, of any activity, plan, study or report required by this Consent Order, and in the manner required by this Consent Order and within the specified time schedules in and approved under this Consent Order. Stipulated penalties shall accrue as follows:

- a. For any failure to commence, perform or complete Work as prescribed in this Consent Order: \$500 per day for one to seven days or part thereof of noncompliance, and \$1,000 per day for each day of noncompliance, or part thereof, thereafter;
- b. For any failure to submit any draft or final work plans, plans, or reports as required by this Consent Order: \$500 per day for one to seven days or part thereof of noncompliance, and \$1,000 per day for each day of noncompliance, or part thereof, thereafter; and
- c. For any failure to submit other deliverables as required by this Consent Order: \$200 per day for one to seven days or part thereof of noncompliance, and \$400 per day for each day of noncompliance, or part thereof, thereafter.

129. All stipulated penalties shall begin to accrue the first day that a violation occurs, or the first day after the date that complete performance is due, and shall continue to accrue through the

final day of or correction of the violation. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Order.

130. All stipulated penalties owed to the EPA under this Section shall be due within thirty (30) calendar days of receipt of a demand for payment, unless Respondent invokes the dispute resolution procedures in Section XVII (Dispute Resolution). Such demand for payment shall describe the noncompliance and shall indicate the amount of stipulated penalties due.

131. All stipulated penalty payments may be made by certified or cashier's check payable to the Treasurer of the United States of America and shall be remitted to:

United States Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, Missouri 63197-9000

All payments shall reference Respondent's name and address, and the EPA Docket Number of this Consent Order. Copies of the transmittal of payment shall be sent simultaneously to the EPA Project Coordinator.

In the alternative, payment may be made by wire transfer with a notation of the EPA Docket Number of the Consent Order, and by using the following instructions:

Federal Reserve Bank of New York
ABA: 021030004
Account Number: 68010727
SWIFT address: FRNYUS33
33 Liberty Street
New York, New York 10045
Field Tag 4200 of the Fedwire message should read:
"D 68010727 Environmental Protection Agency

Respondent shall forward evidence of wire transfer to the EPA, within five (5) days of payment, to:

Roberto X. Busó
Assistant Regional Counsel
RCRA/FIFRA/TSCA Law Office
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
Phone: 404-562-8530
buso.roberto@epa.gov

and to:

Wendy Bias
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 4

132. The assessment of stipulated penalties set forth in this Section shall not preclude the EPA from pursuing any other remedies or sanctions which may be available to the EPA by reason of Respondent's failure to comply with any of the requirements of this Consent Order. EPA may, at its sole discretion, waive or reduce any stipulated penalties that would otherwise be due hereunder.

133. Respondent may dispute the EPA's demand for payment of stipulated penalties for any alleged violation of this Consent Order by invoking the dispute resolution procedures below under Section XVII (Dispute Resolution). Stipulated penalties shall continue to accrue, but are not required to be paid, for any alleged noncompliance which is the subject of a dispute resolution during the period of such dispute. To the extent that Respondent does not prevail upon resolution of the dispute, Respondent shall remit to the EPA within twenty-one (21) calendar days of receipt of the EPA's written decision as to said dispute, any outstanding penalty payment in the manner described in this Section. To the extent Respondent prevails upon resolution of the dispute, no penalties shall be payable.

134. Neither the filing of a petition to resolve a dispute nor the payment of stipulated penalties shall in any way alter Respondent's obligation to comply with the requirements of this Consent Order.

XVII. DISPUTE RESOLUTION

135. If a dispute arises under this Consent Order, the procedures of this Section shall apply. The Parties shall make reasonable efforts to informally resolve disputes at the Project Coordinator or immediate supervisor level.

136. If Respondent disagrees, in whole or in part, with any EPA disapproval or other decision or directive made by EPA pursuant to this Consent Order, Respondent shall notify the EPA in writing of its objections, and the basis therefor, within fourteen (14) calendar days after receipt of the EPA's disapproval, decision or directive. Such notice shall set forth the specific points of the dispute, the position which Respondent asserts should be adopted as consistent with the requirements of this Consent Order, the basis for Respondent's position, and any matters which it considers necessary for the EPA's determination. The EPA and Respondent shall have an additional fourteen (14) calendar days from the receipt by the EPA of the notification of objection, during which time representatives of the EPA and Respondent may confer in person or by telephone to resolve any disagreement. If an agreement is reached, the resolution shall be written and signed by an authorized representative of each party. In the event a resolution is not reached within the twenty-eight (28) calendar day period, the EPA will furnish to Respondent, in writing, its decision on the pending dispute. Said written decision shall state the basis and rationale for the decision.

137. Except as provided in this Section, the existence of a dispute, as defined in this Section, and the EPA's consideration of matters placed into dispute, shall not excuse, toll or suspend any other compliance obligation or deadline required pursuant to this Consent Order during the pendency of the dispute resolution process.

XVIII. RESERVATION OF RIGHTS

138. The EPA expressly reserves all rights and defenses that it may have, including the right both to disapprove of work performed by Respondent pursuant to this Consent Order, to order that Respondent correct and/or re-perform any work disapproved by the EPA, and to order that Respondent perform additional work.

139. The EPA expressly reserves all of its statutory and regulatory powers, authorities, rights, remedies, both legal and equitable, including any which may pertain to Respondent's failure to comply with any of the requirements of this Consent Order, including, without limitation, the right to commence a civil action against Respondent seeking an order requiring compliance with this Consent Order and/or the assessment of penalties under Section 3013(e) of RCRA, 42 U.S.C. § 6934(e), and all rights the EPA has pursuant to RCRA § 3013(d), 42 U.S.C. § 6934(d), to conduct monitoring, testing, and analysis at the Facility and to seek reimbursement from Respondent for the costs of such activity. This Consent Order shall not be construed as a covenant not to sue, or as a release, waiver or limitation of any rights, remedies, defenses, powers and/or authorities, civil or criminal, which the EPA has under RCRA, CERCLA, the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), the Clean Air Act (CAA), or any other statutory, regulatory, or common law enforcement authority of the United States.

140. In the event and to the extent that Respondent fails to carry out work provided for in this Consent Order, EPA reserves the right to perform any portion of the work required herein or any additional monitoring, sampling, analysis, or reporting it deems necessary to protect public health or welfare or the environment. The EPA reserves the right to seek reimbursement from Respondent for costs incurred by the EPA in connection with any such actions, pursuant to any right it may have under applicable law.

141. EPA reserves whatever rights it may have under any environmental law or authority, or in equity, to seek to recover from Respondent any costs incurred by the EPA in overseeing the implementation of this Consent Order.

142. Except as otherwise provided in this Consent Order, Respondent reserves whatever rights and defenses it may have under any environmental law or authority, or in equity, to respond to or to defend against any claim asserted by EPA including, without limitation, any claim for recovery of costs incurred by EPA, pursuant to CERCLA or otherwise. Except as otherwise provided in this Consent Order, entry into this Consent Order by Respondent shall not be treated or interpreted as an admission by Respondent of any factual or legal assertion, including, but not limited to, EPA's findings of fact and determinations and conclusions of law set forth in Sections IV and V.

XIX. FORCE MAJEURE

143. Respondent shall perform the requirements of this Consent Order in the manner and within the time limits set forth herein, unless the performance is prevented or delayed by events which constitute a *force majeure*. Respondent shall have the burden of proving such a *force majeure*. A *force majeure* is defined as any event arising from causes not reasonably foreseeable and beyond the control of Respondent, which cannot be overcome by due diligence and which delays or prevents performance in the manner or by a date required by this Consent Order. A *force majeure* does not include: increased costs of performance; changed economic circumstances; failure to obtain federal, State or local permits; reasonably foreseeable weather conditions; or weather conditions which could have been overcome by due diligence.

144. Respondent shall notify the EPA, in writing, within ten (10) calendar days after it becomes or should have become aware of any event which Respondent claims constitutes a *force majeure*. Such notice shall estimate the anticipated length of delay, including necessary demobilization and remobilization, its cause, measures taken or to be taken to prevent or minimize the delay, and an estimated time table for implementation of these measures. Failure to comply with the notice provision of this paragraph shall constitute a waiver of Respondent's right to assert a *force majeure* claim with respect to such event. If, in the EPA's sole and unreviewable discretion, the EPA determines that the failure to give notice was not prejudicial to the EPA's efforts to protect human health or the environment, Respondent's failure to give notice shall not constitute a waiver. In addition to the above notification requirements, Respondent shall undertake all reasonable actions to prevent or to minimize any delay in achieving compliance with any requirement of this Consent Order after it becomes or should have become aware of any event which may delay such compliance.

145. If the EPA determines that the failure to comply or delay has been or will be caused by a *force majeure*, the time for performance of that requirement of this Consent Order may be extended, upon EPA approval, for a period equal to the delay resulting from such *force majeure*. This shall be accomplished through an amendment to this Consent Order pursuant to Section XXII (Subsequent Modification of Order). Such an extension shall not alter the schedule for performance or completion of any other tasks required by this Consent Order, unless these tasks are unavoidably affected by the delay. In the event that the EPA and Respondent cannot agree that any delay or failure has been or will be caused by a *force majeure*, or if there is no agreement on the length of the extension, Respondent may invoke the dispute resolution procedures set forth in Section XVII (Dispute Resolution).

XX. OTHER APPLICABLE LAWS

146. All actions required to be taken by Respondent pursuant to this Consent Order shall be undertaken in accordance with the requirements of all applicable federal, state, and local laws, regulations, permits, and ordinances.

147. Compliance by Respondent with the terms of this Consent Order shall not relieve Respondent of its obligations to comply with RCRA, or any other applicable federal, state, or local laws, regulations, permits, and ordinances.

148. This Consent Order is not and shall not be interpreted to be a permit, or as a ruling or a determination of any issue related to a permit under federal, state or local law. This Consent Order shall not in any way affect Respondent's obligation, if any, to secure such a permit, nor shall this Consent Order be interpreted in any way to affect or waive any of the conditions or requirements that may be imposed by such permit, nor of Respondent's right to appeal any conditions of such permit. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.

XXI. OTHER CLAIMS

149. Nothing in this Consent Order shall constitute or be construed as a release from any claim, cause of action, demand, or defense in law or equity, against any person, firm, partnership, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any solid wastes, hazardous wastes, hazardous constituents, hazardous substances, pollutants, or contaminants found at, taken to, or migrating from the Facility.

150. By issuance of this Consent Order, the United States and the EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent or its agents, contractors, subcontractors or other representatives.

151. Neither the United States nor the EPA shall be deemed a party to any contract involving Respondent and relating to activities at the Facility and shall not be liable for any claim or cause of action arising from, or on account of, any act or omission of Respondent, its officers, employees, contractors, receivers, trustees, agents or assigns, in carrying out the activities required by this Consent Order.

XXII. SUBSEQUENT MODIFICATION OF ORDER

152. This Consent Order may only be modified by written amendment signed by the undersigned EPA Region 4 Enforcement and Compliance Assurance Division Director. Modifications in any schedule adopted pursuant to this Consent Order may be made in writing by the EPA's Project Coordinator.

153. No informal advice, guidance, suggestions, or comments by the EPA shall be construed to modify the requirements of this Consent Order. Routine communications exchanged verbally, in person, by telephone or by electronic mail between the parties to facilitate the orderly conduct of Work contemplated by this Consent Order shall not alter or waive any rights and/or obligations of the parties under this Consent Order.

154. Any reports, plans, specifications, schedules, other submissions and attachments required by this Consent Order are, upon written approval by the EPA, incorporated into this Consent Order. Any noncompliance with such EPA-approved reports, plans, specifications, schedules, other submissions, and attachments shall be considered a violation of this Consent Order and shall subject Respondent to the stipulated penalty provisions of this Consent Order.

155. Minor modifications in the studies, techniques, procedures, designs or schedules utilized in carrying out this Consent Order and necessary for the completion of the Work may be made by written agreement of the Project Coordinators. Such modifications shall have as an effective date the date on which the agreement is signed by the EPA Project Coordinator.

XXIII. SEVERABILITY

156. If any provision or authority of this Consent Order, or the application of this Consent Order to any party or circumstances, is held by any judicial or administrative authority to be invalid, the application of such provisions to other parties or circumstances and the remainder of the Consent Order shall not be affected thereby and shall remain in full force.

XXIV. TERMINATION AND SATISFACTION

157. Respondent may seek termination of this Consent Order by submitting to the EPA a written document which indicates Respondent's compliance with all requirements of this Consent Order, and the associated dates of approval correspondence from the EPA. The provisions of this Consent Order shall be deemed satisfied upon Respondent's and the EPA's execution of an "Acknowledgment of Termination and Agreement for Record Preservation and Reservation of Rights" (Acknowledgment). The Acknowledgment shall specify that Respondent has demonstrated to the satisfaction of the EPA that the terms of this Consent Order, including any additional work determined by the EPA to be required pursuant to this Consent Order, have been satisfactorily completed. The Acknowledgment shall not, however, terminate Respondent's obligations to comply with any continuing obligations hereunder, including, but not limited to, Section XIV (Record Preservation); Section XVIII (Reservation of Rights); Section XX (Other Applicable Laws); and Section XXI (Other Claims).

XXV. SURVIVABILITY/PERMIT INTEGRATION

158. Except as otherwise expressly provided in this Section, this Consent Order shall survive the issuance or denial of a RCRA permit for the Facility, and this Consent Order shall continue in full force and effect after either the issuance or denial of such permit. Accordingly, Respondent shall continue to be liable for the performance of obligations under this Consent Order notwithstanding the issuance or denial of such permit.

159. Subsequent to the issuance of this Consent Order, a permit or order may be issued to the Facility incorporating the requirements of this Consent Order by reference. If the Facility is issued a RCRA permit or order that expressly incorporates all or a part of the requirements of this Consent Order, Respondent may request a modification of this Consent Order and shall, with EPA approval, be relieved of liability under this Consent Order for those specific obligations.

XXVI. ATTORNEYS' FEES AND COSTS

160. Respondent shall bear its own costs and attorneys' fees.

XXVII. EFFECTIVE DATE

161. The Consent Order shall be effective on the date Respondent receives a true and correct copy of this fully executed Consent Order.

DOCKET NO: RCRA-04-2019-4350

**IT IS SO AGREED AND ORDERED
BY U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4**

DATE: 10/28/19

BY: J. SH CH
Suzanne G. Rubini
Acting Director
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

FOR COMPLAINANT

DATE: 10/2/2019

BY: Timothy R. Basilone
Timothy R. Basilone
Vice President, Environmental Affairs
American Zinc Products LLC
3000 GSK Drive, Suite 201
Moon Township, Pennsylvania 15108

FOR RESPONDENT

DOCKET NO: RCRA-04-2019-4350

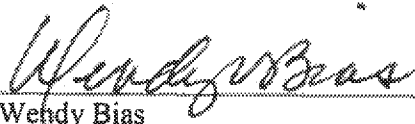
CERTIFICATE OF SERVICE

I hereby certify that one copy of the foregoing RCRA SECTION 3013 ADMINISTRATIVE ORDER ON CONSENT REQUIRING MONITORING, TESTING, ANALYSIS AND REPORTING was sent by Certified Mail, Return Receipt Requested to:

Mr. Timothy R. Basilone
Vice President – Environmental Affairs
American Zinc Products LLC
3000 GSK Drive, Suite 201
Moon Township, Pennsylvania 15108

I have further caused the original and one copy of the RCRA SECTION 3013 ADMINISTRATIVE ORDER ON CONSENT and the Certificate of Service to be filed with Roberto X. Busó, Assistant Regional Counsel, United States Environmental Protection Agency, Region 4, 61 Forsyth Street, S.W., Atlanta, Georgia 30303, on the date specified below.

Dated this 28 day of October, 2019.



Wendy Bias
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 4